

## CLAIMS

What is claimed is:

1. A method of delivering a nucleic acid of interest to a fibroblast-like or a macrophage-like cell *in vitro*, the method comprising:  
providing a recombinant adenovirus of subgroup C comprising the nucleic acid of interest and having a tissue tropism for fibroblast-like or macrophage-like cells, wherein the capsid of said recombinant adenovirus comprises at least one protein of an adenovirus serotype of subgroup C and at least the tissue tropism determining domain of a fiber protein of a second adenovirus serotype, said second adenovirus serotype being from the group consisting of: adenovirus serotype 11, 16, 35, and 51; and  
infecting a fibroblast-like or a macrophage-like cell with said recombinant adenovirus.
2. The method according to claim 1, wherein said adenovirus of subgroup C is adenovirus serotype 5.
3. The method according to claim 2, wherein said recombinant adenovirus comprises an adenovirus serotype 5 genome, wherein a sequence encoding the tissue tropism determining domain of the fiber protein of serotype 5 is replaced by a sequence encoding the tissue tropism determining domain of the fiber protein of said second adenovirus serotype.
4. The method according to claim 3, wherein said recombinant adenovirus comprises at least one deletion in the E1 or the E3 region, where the nucleic acid of interest is inserted or can be inserted.

5. The method according to claim 1, wherein said nucleic acid of interest encodes a gene product selected from the group consisting of: the Herpes Simplex Virus thymidine kinase, an apolipoprotein, a nitric oxide synthase, interleukin-3, interleukin-1RA, interleukin-1alpha, an (anti)angiogenesis protein, an anti-proliferation protein, a Vascular Endothelial Growth Factor (VEGF), a basic Fibroblast Growth Factor (bFGF), a hypoxia inducible factor 1 alpha (HIF-1 alpha), PAI-1, a smooth muscle cell anti-migration protein, erythropoietin (EPO), CD40, FasL, interleukin-12, interleukin-10, interleukin-4, interleukin-13, an excreted single chain antibody to CD4, CD5, CD7, CD52, interleukin-2, interleukin-1, interleukin-6, tumour necrosis factor (TNF), an excreted single chain antibody to a T-cell receptor on auto-reactive T-cells, a dominant negative mutant of promyelocytic leukemia (PML), an antagonist of inflammation promoting cytokines, Bcl3, VP3 of chicken anemia virus, cytosine deaminase, nitroreductase, and linamerase.

6. An *in vitro* fibroblast-like or a macrophage-like cell having been provided with a nucleic acid of interest by the method of claim 1.